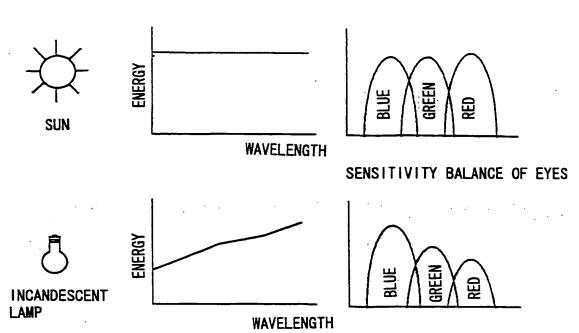


F I G. 2



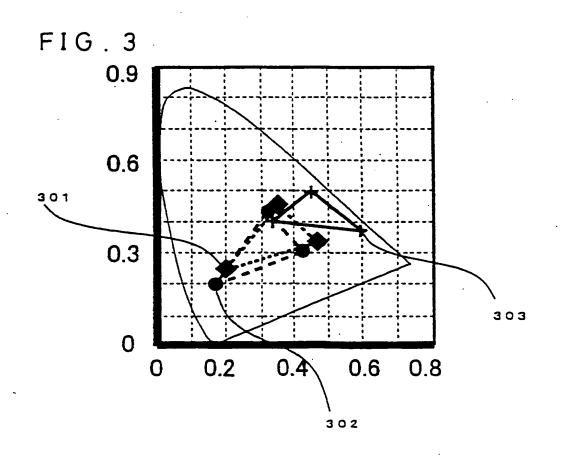
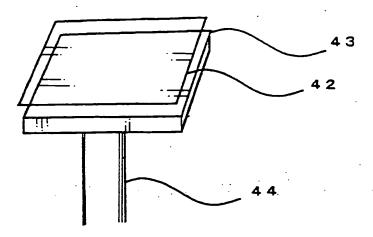


FIG. 4



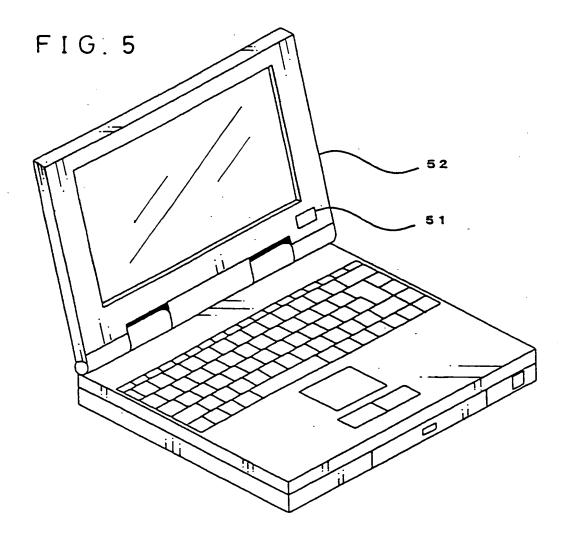


FIG. 6

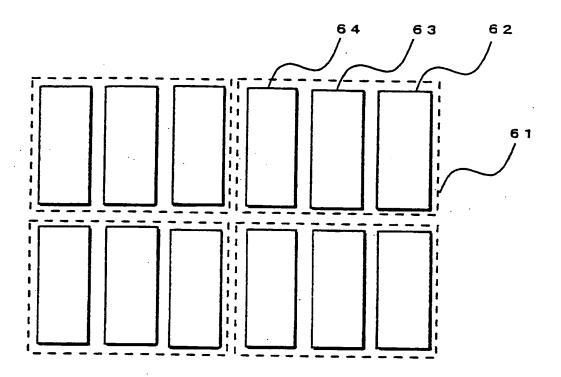
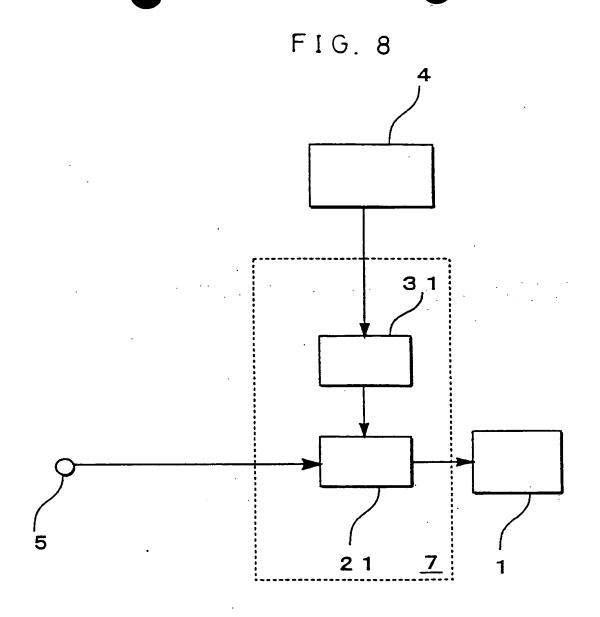


FIG. 7 3,2 2 2

6



F 1G. 9

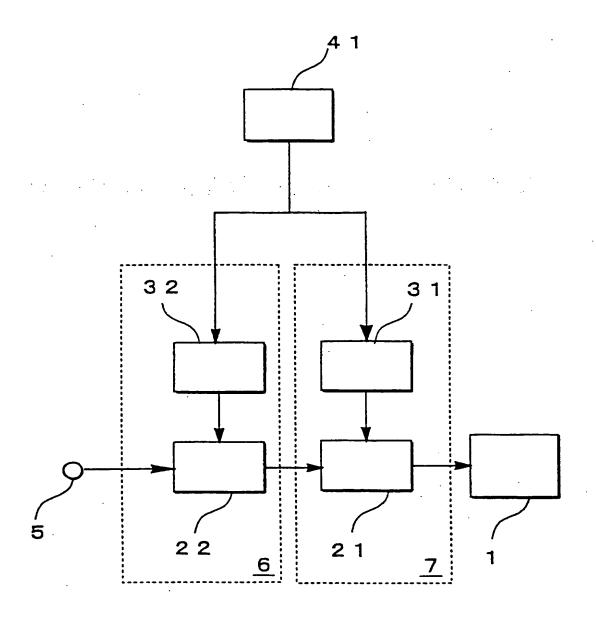
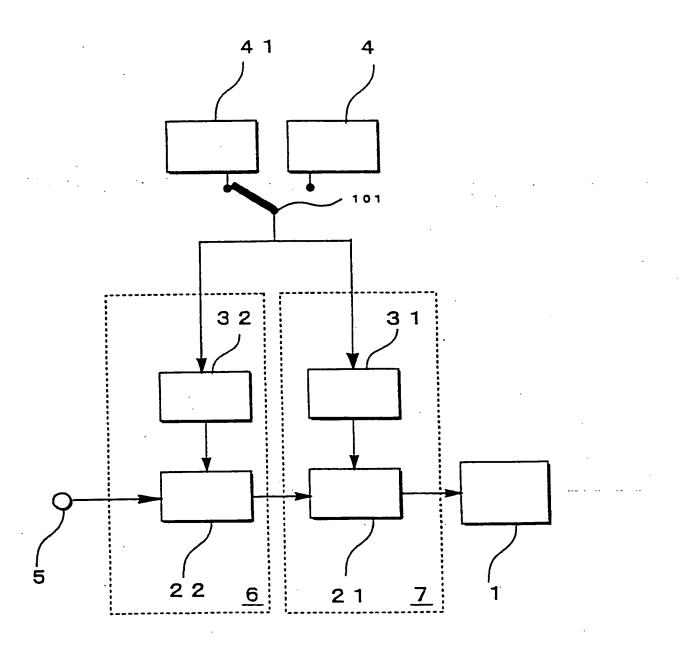
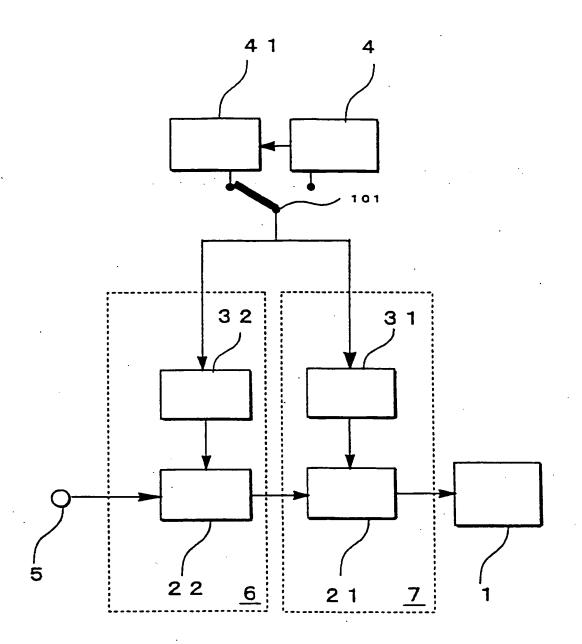


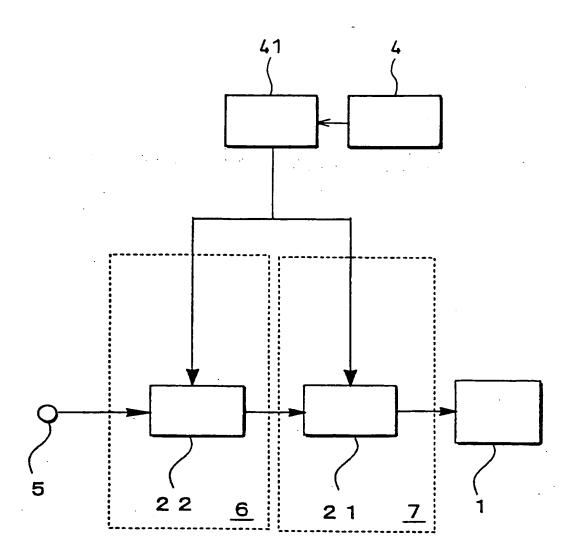
FIG. 10



F I G . 11



F I G . 12



F I G. 13

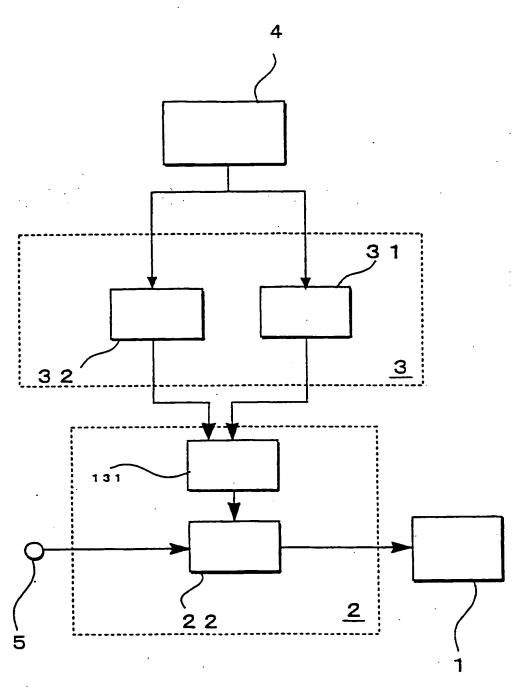


FIG.14

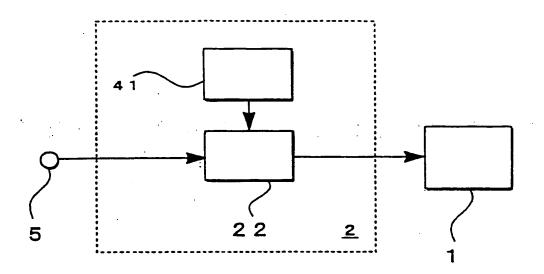


FIG. 15

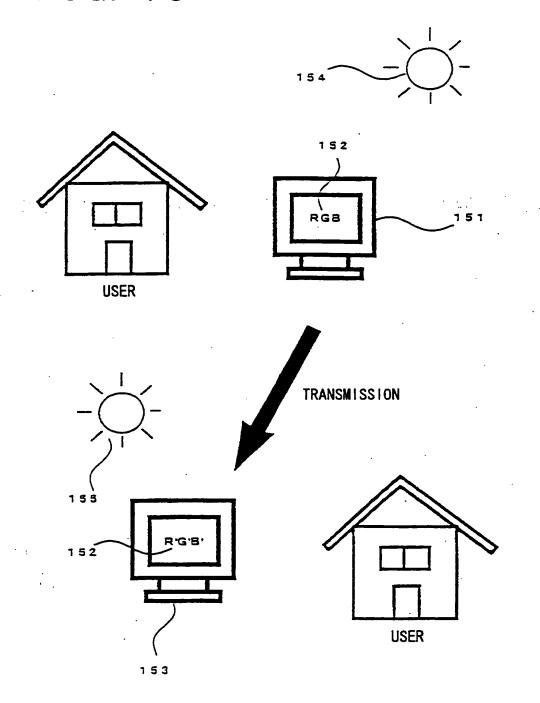
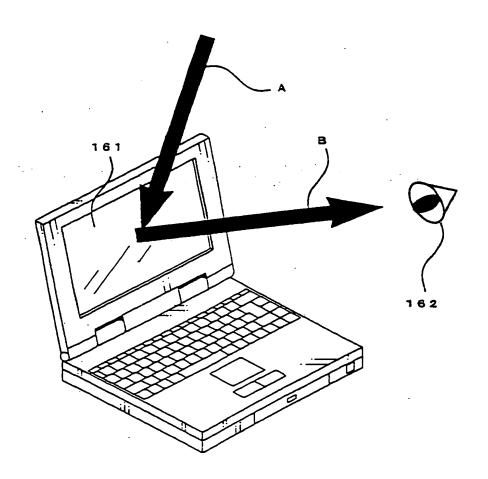
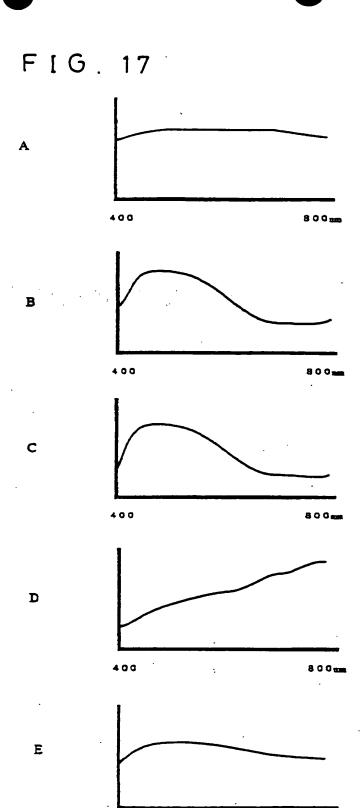


FIG.16





400

500<u>nm</u>

FIG. 18

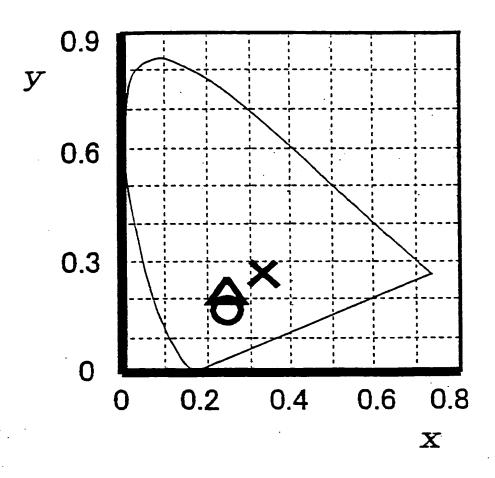


FIG. 19

```
/<del>***************</del>*
  transform Program
        for
      colour
    coordinate
*************************/
#include <stdio.h>
void
main()
        float
d[4][3],a[3][3],b[3],c[3],dd[3],r[3][3],kk[3][3],ss,sss;
        int i,j,k;
        /* input x & y of RGBW */
        printf("INPUT RGB and White\n");
        printf("Rx Ry Gx Gy Bx By Wx Wy\n");
        scanf("Xf Xf Xf Xf Xf Xf Xf Xf Xf", &d[0][0],&d[0][1]
                                        , &d[1][0],&d[1][1]
                                        , &d[2][0], &d[2][1]
                                        , 뫏[3][0],뫏[3][1]);
/*
        d[0][0] = 0.67;
        d[0][1] = 0.33;
        d[1][0] = 0.21;
        d[1][1] = 0.71;
        d[2][0] = 0.14;
        d[2][1] = 0.08;
        d[3][0] = 0.31;
        d[3][1] = 0.316;
```

FIG. 20

/* calculate z from x & y */
for(i = 0; i < 4; i++){

```
if((d[i][0] + d[i][1]) > 1.0){
               d[i][2] = 0.0;
             d[i][2] = 1.0 - d[i][0] - d[i][1];
     }
     printf("MATRIXY");
     for(i = 0; i < 3; i + ){
       printf("\f");
       for( j = 0; j < 3; j++){
          printf("%5.3f\f",d[i][j]);
       }
       printf("Yn");
FIG 21
     /* caluculate matrix */
       int i1, i2, j1, j2;
       for(i = 0; i < 3; i++){}
           i1 = i + 1;
           i2 = i + 2;
           if (i1 > 2) i1 = 0;
           if (i2 > 2) i2 = i2 - 3;
         for(j = 0; j < 3; j++){
           j1 = j + 1;
           j2 = j + 2;
         if (j1 > 2) j1 = 0;
           if (j2 > 2) j2 = j2 - 3;
           a[i][j] = d[i1][j1]*d[i2][j2] - d[i1][j2]*d[i2][j1];
         }
       }
     /* calculate of BUNBO */
     for(i = 0; i < 3; i \leftrightarrow){}
       b[i] = 0;
       for(j = 0; j < 3; j++){}
         b[i] = a[i][j] * d[3][j] + b[i];
       }
     }
```

و به و

F I G . 22

```
/* MATRIX */
for(i = 0; i < 3; i++){
  for(j = 0; j < 3; j++){}
    a[i][j] = a[i][j] / b[i];
    r[i][j] = a[i][j];
    if(i = j){
         kk[i][j] = 1.0;
     } else {
         kk[i][j] = 0.0;
/* INVERSE MATRIX */
for(i = 0; i < 3; i \leftrightarrow){
  for(j = 0; j < 3; j \leftrightarrow){}
    dd[j] = a[j][i];
    a[j][i] = 0.0;
  a[i][i] = 1.0;
  for(j = 0; j < 3; j \leftrightarrow){}
    c[j] = a[i][j] / dd[i];
  }
  for(j = 0; j < 3; j \leftrightarrow){}
    for(k = 0; k < 3; k \leftrightarrow){
       a[j][k] = a[j][k] - c[k]*dd[j];
    }
  }
  for(j = 0; j < 3; j \leftrightarrow){
    a[i][j] = c[j];
}
```

FIG. 23

```
/* SEIKIKA */
ss = a[1][0] + a[1][1] + a[1][2];
sss = r[1][0] + r[1][1] + r[1][2];
for(i = 0; i < 3; i++){
  for(j = 0; j < 3; j++){
    a[i][j] = a[i][j] / ss;
    r[i][j] = r[i][j] / sss;
}
```

}

1 to 1

FIG. 24

```
/* result */
printf("original data#n");
for(i = 0; i < 4; i++){
  printf("Ft");
  for(j = 0; j < 3; j++){
        printf("%7.5f ",d[i][j]);
  printf("Yn");
printf("MATRIXY"");
for(i = 0; i < 3; i++){
  printf("\t");
  for( j = 0; j < 3; j \leftrightarrow ){}
         printf("%7.5f ",r[i][j]);
  printf("Yn");
printf("INVERCE MATRIXY");
for(i = 0; i < 3; i++){
  printf("\t");
   for( j = 0; j < 3; j \leftrightarrow ){
         printf("%7.5f ",a[i][j]);
   }
  printf("%n");
 }
 for(i = 0; i < 3; i++){
   for(j = 0; j < 3; j++){
     kk[i][j] = a[i][0]*r[0][j] + a[i][1]*r[1][j] + a[i][2]*r[2][j];
   } ·
 printf("KAKEZAN#n");
 for(i = 0; i < 3; i++){}
   printf("Yt");
   for( j = 0; j < 3; j++){
         printf("%7.5f ",kk[i][j]);
   printf("\f");
```

FIG. 25

